



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/808,395	03/14/2001	K. Theodor Krantz	05918-117001	3672

26161 7590 11/19/2003

FISH & RICHARDSON PC
225 FRANKLIN ST
BOSTON, MA 02110

EXAMINER

PIAZZA CORCORAN, GLADYS JOSEFINA

ART UNIT	PAPER NUMBER
----------	--------------

1733

DATE MAILED: 11/19/2003

20

Please find below and/or attached an Office communication concerning this application or proceeding.

CL020

Office Action Summary

Application No.

09/808,395

Applicant(s)

KRANTZ ET AL.

Examiner

Gladys J Piazza Corcoran

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 84-103 is/are pending in the application.
- 4a) Of the above claim(s) 91 and 92 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 84-90 and 93-103 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6 7 8 10.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species of the claimed invention:

Species I, where the fastener elements are formed of longitudinally continuous bands of fastener elements, apparently claims 85, 94.

Species II, where the fastener elements are formed in discrete amounts to form isolated islands, apparently claim 92.

Species A, where the pre-form sheet is elastically stretchable, apparently claims 86-90, 96, 97, and 101.

Species B, where the pre-form sheet is inelastic in all directions, apparently claim 91.

Applicant is required under 35 U.S.C. 121 to elect **a single disclosed species for each group of Species** for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, 84, 93, 95, 98-100, 102, 103 are generic.

Applicant is advised that a reply to this requirement **must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon**, including any claims subsequently added. An

Art Unit: 1733

argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

2. During a telephone conversation with James W. Babineau on November 12, 2003 a provisional election was made with traverse to prosecute the invention of Species I and Species A, claims 1-90, 93-103. Affirmation of this election must be made by applicant in replying to this Office action. Claims 91 and 92 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

4. Claims 91, 92 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Species II and Species A, there being no allowable generic or linking claim. Election was made **with** traverse in the telephone election.

Information Disclosure Statement

5. The information disclosure statement filed August 16, 2001 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to for the foreign references, as indicated by the lines through the citations, has not been considered.

Specification

6. The disclosure is objected to because of the following informalities: The Specification contains references to US Application numbers whose status should be updated to include their current US Patent Nos. Some of the references are found on pages 22, 18, 21, 23, 24, 26, and 37.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 1733

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 84-90, 93-103 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claim 84 recites the limitation "the fastener product" in line 13. There is insufficient antecedent basis for this limitation in the claim. It is suggested to amend to --the pre-formed sheet material laminated to the molded fastener elements-- or to define forming a fastener product in a previous step.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 84, 85, 93-95 are rejected under 35 U.S.C. 102(b) as being anticipated by Murasaki (US Patent No. 5,643,651).

Murasaki discloses a method of forming a fastener product by providing a mold roll (2) having mold cavities (5) shaped to form loop-engageable fastener hooks, introducing separate spaced apart amounts of molten resin to the mold roll in a manner to fill the mold cavities and form respective resin bases at the surface of the mold roll (column 4, lines 10-13; column 6, lines 53-60), introducing a pre-formed sheet material

Art Unit: 1733

(12) to the resin to laminate the material to the bases, with the sheet material extending laterally across the resin bases and at least one resin-free region of the material extending between and connecting the bases, with the pre-formed sheet material connecting the bases, cooling the resin in the mold cavities to form molded fastener elements integrally molded with and extending from the bases (column 4, lines 25-48), and then pulling the molded fastener elements from the mold cavities to separate the fastener product from the mold (column 4, line 58 to column 5, line 8).

As to claim 85, the mold roll has cavities arranged to form longitudinally continuous spaced apart bands of loop-engageable fastener elements (column 4, lines 25-48). As to claim 93, the molded fastener elements are molded to have crooks that individually point in a given direction (column 7, lines 45-59). As to claim 94, the bases comprise longitudinally continuous bands of the resin, with longitudinally exposed regions of sheet material therebetween (see figures). As to claim 95, the fastener elements each have a molded stem that tapers outwardly to narrower dimension from a relatively wide width at its base (see figures).

12. Claims 84, 85, 93-95, 98, 99 are rejected under 35 U.S.C. 102(b) as being anticipated by Wessels et al. (US Patent No. 5,669,120).

Wessels discloses a method of forming a fastener product by providing a mold roll (2) having mold cavities (5) shaped to form loop-engageable fastener hooks, introducing separate spaced apart amounts of molten resin to the mold roll in a manner to fill the mold cavities and form respective resin bases at the surface of the mold roll (column 9, line 50 to column 10, line 6), introducing a pre-formed sheet material (S) to

Art Unit: 1733

the resin to laminate the material to the bases, with the sheet material extending laterally across the resin bases and at least one resin-free region of the material extending between and connecting the bases, with the pre-formed sheet material connecting the bases, cooling the resin in the mold cavities to form molded fastener elements integrally molded with and extending from the bases (column 7, lines 41-50), and then pulling the molded fastener elements from the mold cavities to separate the fastener product from the mold (column 7, line 50 to column 8, line 5).

As to claim 85, the mold roll has cavities arranged to form longitudinally continuous spaced apart bands of loop-engageable fastener elements (column 5, line 51 to column 5, line 11). As to claim 93, the molded fastener elements are molded to have crooks that individually point in a given direction (see figures). As to claim 94, the bases comprise longitudinally continuous bands of the resin, with longitudinally exposed regions of sheet material therebetween (see figures). As to claim 95, the fastener elements each have a molded stem that tapers outwardly to narrower dimension from a relatively wide width at its base (see figures). As to claims 98 and 99, Wessels discloses the pre-form sheet material has at least one side which defines hook engageable loops exposed for engagement by fastener elements and they lie on the same side of the pre-formed sheet material as and closely adjacent to the bases (see figures; column 9, line 50 to column 10, line 6).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1733

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

15. Claims 102, 103 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murasaki (US Patent No. 5,643,651) or alternatively Wessels et al. (US Patent No. 5,669,120) as set forth above for claim 84.

It is unclear in Murasaki or alternatively Wessels what the respective widths of the resin bands and the regions in between free from resin are. However, it would have been well within the purview of one of ordinary skill in the art to select the appropriate widths of the bands and regions for the particular end product desired. Only the expected results would be attained by selecting the claimed width of the resin-free region as three to five times wider than the base widths. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method of

Art Unit: 1733

forming fastener products as shown in Murasaki or alternatively Wessels by providing the resin-free regions with a width greater than the bases, in particular three to five times greater as it would have been well within the purview of one of ordinary skill in the art, only the expected results would be attained.

16. Claim 98 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murasaki (US Patent No. 5,643,651) as set forth above for claim 84, and further in view of Kennedy (US Patent No. 5,260,015).

Murasaki discloses forming the loop engageable fastener hooks of resin by impregnating through the pre-formed sheet and then molding the regions of resin to form the resin fastener hooks. Kennedy discloses providing the resin region on only one surface of the web only to a degree to firmly hold the resin region to the web and does not encase or impregnate the web to destroy the aesthetic characteristics as a functional backing material to modify the back surface of the fastener (column 2, lines 20-53). Furthermore, Kennedy discloses using loop material as the web material in order to form back to back fasteners with less bulk (column 2, lines 40-53). It would have been obvious to one of ordinary skill in the art at the time of the invention to form the web as shown in Murasaki with bands of resin regions where the resin is applied to only one surface of the web in order to not fully encase or impregnate the web and to not destroy the aesthetic characteristics of the web and to modify the back surface of the fastener to include functional surfaces such as loop material as shown by Kennedy.

17. Claims 86-90, 96, 97, 99-101 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murasaki in view of Kennedy as set forth above for claim 98, and

Art Unit: 1733

further in view of Weirich (WO 97/25893), Verona (WO 99/22619 or US Patent No. 6,197,404), and/or Shepard '452 (WO 99/11452).

The references Murasaki and Kennedy do not specifically disclose whether the web material is an elastic material, however both disclose the web can be a variety of known materials including woven and non-woven webs. It is well within the purview of one of ordinary skill in the art to provide an elastic material as the web material as a well known material property for webs of fastening materials in a variety of applications. This is particularly true since Murasaki emphasizes a fastening material that is conformable and flexible. Furthermore, Kennedy discloses the improvement that the web material is a loop material and these materials are well known to be elastic materials as exemplified by Weirich, Verona, and/or Shepard '452. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the web in Murasaki and Kennedy of an elastic material as is well within the purview of one of ordinary skill in the art since Murasaki discloses the importance of flexibility of the material and Kennedy discloses the preference of using loop material as the web material which is well known to be elastic as exemplified by Weirich, Verona, and/or Shepard '452, only the expected results would be attained.

As to claims 87 and 96, Weirich and Verona both show a known material for loop fastener webs where the material is elastically stretchable in only a transverse direction. As to claims 88 and 89, Weirich, Verona, and/or Shepard '452 all disclose that the elastic material includes a textile component that is a stretchable nonwoven material that defines hook engageable loops. As to claim 97, Weirich discloses that the sheet

Art Unit: 1733

comprises a layer of thermoplastic elastomer. As to claim 99, Weirich discloses hook engageable loops on both sides of the web material, thus hook-engageable loops would lie on the same side of the pre-formed sheet material as and closely adjacent to the bases when used with the method as shown by Murasaki and Kennedy. As to claim 100, Weirich discloses the web comprises multiple layers including an upper layer (this layer would be the layer laminated to the bases; trilaminate). As to claim 101, in Weirich the preformed sheet material includes a lower elastically stretchable layer (trilaminate).

As to claim 90, the nonwoven material in Shepard '452 comprises a needled batt of staple fibers which has been stretched in both directions with a binder stabilizing the material in said stretched state. Verona discloses it is known in the art to stretch the web substantially in one direction only while the batt has been allowed to neck in the cross machine direction, whereby the material is substantially elastically stretchable in only one direction corresponding to the direction in which it has not been stretched during manufacture in order to form a material stretchable in the cross machine direction. It would have been obvious to one of ordinary skill in the art at the time of the invention to stretch the nonwoven material in Shepard '452 in order to allow the material to stretch in the cross machine direction as shown by Verona, only the expected results would be attained.

18. Claims 99, 102 and 103 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murasaki in view of Kennedy as set forth above for claim 98, and further in view of Shepard '623 (US Patent No. 6,205,623).

Art Unit: 1733

It is known in the art to provide loop materials for laminating with hook material where the loop material has different properties. For example, Shepard '623, discloses the loop material may have loops on both sides of the material, thus the loops would lie on the same side of the pre-formed sheet material as and closely adjacent to the bases when used with the method as shown by Murasaki and Kennedy. Shepard '623 also discloses forming a product with the width of the resin-free region as three to five times wider than the base widths (column 9, line 64 to column 10, line 10). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method of forming the fastener product as shown by Murasaki and Kennedy with the web of a non-woven loop material with qualities known in the art as shown by Shepard '623 in order to provide the desired end product, only the expected results would be attained.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gladys J Piazza Corcoran whose telephone number is (703) 305-1271 until December 18, 2003 and (571) 272-1214 afterwards. The examiner can normally be reached on M-F 8am-5:30pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (703) 308-3853. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 1733

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Gladys J. Piazza Corcoran
Examiner
Art Unit 1733

GJPC